

Variable binding and the Person Case Constraint

Background. Does the syntax distinguish between free pronouns and bound pronouns? In the context of local binding, the answer has been an unequivocal yes, given the morphological distinctions between reflexives and pronouns. In the non-local case, however, the picture is more mixed. Consider, for example, *John thinks that he is intelligent* under two interpretations: one where *he* is bound by *John* and one where it is free. Based on facts from the domain of the *Person Case Constraint* (PCC), we will show that the syntax is sensitive to this distinction. The core facts that we start from were originally pointed out for Spanish by Roca (1992) and more recently by Ormazabal & Romero (2007:327).

- (1) a. Mateo_i piensa que **lo**_i entregaste a la policía
Mateo thinks that him:ACC handed:SUBJ:2SG to the police
'Mateo thinks that you handed him over to the police.'
b. Mateo_i piensa que **se lo**_{*i/j} entregaste a la policía
Mateo thinks that 3DAT him:ACC handed:SUBJ:2SG to the police
'Mateo thinks that you handed him over to the police.'

Direct object (DO) clitics can be bound by the matrix subject in (1a). However, when the DO clitic co-occurs with an indirect object (IO) clitic, as in (1b), the coreference is blocked. The DO can still refer to other individuals. Let us call this phenomenon a *Clitic Binding Restriction* (CBR). In our preliminary survey, we have found the CBR to also hold in Bulgarian, Catalan, Czech, Serbian, and Slovenian. Below, we use examples from Czech.

Some properties of the CBR. The CBR holds only if variable binding is an option. Variable binding is blocked if the potential binder does not c-command the variable. In such cases, the CBR is obviated.

- (2) Ten člověk, co Petra_i ošidil, říkal, že **jí ho**_i představil.
the person that Petr:ACC tricked said that her:DAT him:ACC introduced
'The person that tricked Petr said that he introduced him to her.'

It is well-known that one cannot bind into an appositive relative clause and indeed in such environment the CBR is obviated (as opposed to the situation in restrictive relatives).

- (3) a. Marie_i o tom mluvila s Karlem, který **mu ji**_i posléze představil.
Marie about it spoke with Karel who him:DAT her:ACC after.that introduced
'Mary spoke about it with Karel, who introduced her to him after that.'
b. Karel_i potkal tu dívku, která **jí ho**_{*i/j} představila.
Karel met the girl who her:DAT him:ACC introduced
'Karel met the girl who introduced him to her.'

What (3b) further shows is that the CBR is not limited to complements of attitude verbs. With attitude verbs, a further asymmetry comes up if we consider non *de se* interpretations. Normally the complement clause is interpreted as a *de se* attitude. But if we set up a non *de se* context where the matrix subject has lost her memory and does not realize that she is making a claim about herself, then the CBR is obviated for most speakers.

- (4) Marie_i pořád ještě věří, že **mu ji**_i^{*de se/non de se} doporučí.
Marie still believes that him:DAT her:ACC recommend.
'Marie still believes that they will recommend her to him.'

Proposal. We follow Ormazabal & Romero (2007) in relating the impossibility of coreference in (1b) to the PCC (Bonet 1991, 1994, Anagnostopoulou 2003, 2005).

- (5) **Strong PCC:** When an IO clitic and a DO clitic co-occur, the DO must be 3rd person.
allowed IO DO combinations: 13, 23, 33; *disallowed:* 12, 21, 31, 32

- (6) **Weak PCC:** When a 3rd Person IO clitic and a DO clitic co-occur, the DO must be 3rd person.
allowed: 13, 23, 33, **12, 21**; *disallowed:* 31, 32

The evidence that the PCC and the CBR interact comes from weak PCC languages (such as Czech): CBR is obviated if the 3rd person bound DO clitic occurs in the presence of a 1st/2nd person IO clitic.

- (7) Marie_i stále ještě věří, že **ti** **ji_i** doporučím.
Marie still believes that you:DAT her:ACC recommend:1SG
'Mary still believes that I will recommend her to you.'

A core idea behind our proposal and one that we share with a number of approaches to the PCC (Anagnostopoulou 2003, 2005, Adger & Harbour 2007, Heck & Richards 2007) is that 3rd person pronouns come in two forms—a featurally more specified variant and a featurally underspecified variant. Abstracting across a number of approaches, the PCC requires the DO to be featurally underspecified. This blocks 1st and 2nd pronouns and the featurally specified (bound) variant of the 3rd person pronoun from appearing as a DO in an IO-DO cluster.

The second component of our proposal is that variable binding involves feature transmission (cf. Kratzer 2009). This is a point that is made most strikingly by bound 1st/2nd person pronouns.

- (8) Only I_i did my_i homework on time.

We assume that feature transmission of the sort seen with 1st/2nd person also takes places with 3rd person pronouns. While 3rd person pronouns are featurally underspecified by default, they may acquire features as a result of variable binding. Feature transmission is the syntactic analogue of variable binding. Now we can provide an explanation for the CBR. In a PCC context, the DO must be featurally underspecified. Note that feature underspecification does not block the DO from referring to individuals in the discourse. However if a DO in a PCC context gets bound, then it obligatorily inherits features from its binder. This means that it is no longer featurally underspecified, which in turn leads to a PCC (CBR) violation.

Implications and consequences. Our findings strongly indicate that binding is preferred over (accidental) coreference quite generally, i.e. not only in local contexts. If accidental coreference was freely available for pronominal anaphora, something like CBR would never exist. This suggests that some version of a “generalized Principle B” must operate in grammar. Furthermore, our findings indicate a rather tight connection between syntax and interpretation/binding, for instance one that has recently been advocated by Kratzer (2009). Under this approach, binding relations are established by grammatical (formal feature-sensitive) mechanisms, in a cyclic, phase-based fashion. If binding relations are not represented in narrow syntax, the existence of the CBR and its affinity to the PCC remain obscure. Finally, the sensitivity of the CBR to the *de se* distinction (4) indicates that the difference between *de se* and non *de se* binding must also be syntactically represented.

References

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